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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/577,664

05/01/2006

Hui Li

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EXAMINER

CASCA, FRED A

ART UNIT

PAPER NUMBER

2617

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/577,664	<b>Applicant(s)</b> LI, HUI	
	<b>Examiner</b> FRED A. CASCA	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### *Claim Rejections –35 U.S.C. 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 12-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Song et al (US 2004/0146013 A1).

Referring to claim 12, Song discloses a method for determining a path to convey information from a first radio station to a second radio station via at least one intermediate radio station (abstract and Fig. 1, note that in WLAN network message is transmitted from one mobile to another mobile via an access point), the information being conveyed such that the first radio station and each intermediate radio station transfer the information to an adjacent radio station in a direction of the path , from a transferor radio station to a transferee radio station (Fig. 1), comprising: dividing a frequency band into a plurality of subbands for communication between the radio stations, with at least one subband being assigned to each radio station (par. 05, note in any WLAN or cellular network, each access point is allocated a bandwidth, and

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each assigned/registered mobile terminal is assigned a portion of that frequency when the mobile terminal is in communication);

determining at least a portion of the path at a radio installation upon request of the first radio station (Par. 13, and Fig. 1, note that radio installation is any part of the radio system that determines the path);

transmitting path identification information from the radio installation to the first radio station (Par. 14, and Fig. 1, note that path identifier is inherent in order to select the right path);

transmitting from the radio installation to one or more intermediate radio station the path identification information (Fig. 1, inherent),

Information identifying an other intermediate radio station and information (Fig. 1, access point)

identifying the subband assigned to it and/or identifying the first radio station and information (Par. 5, note that in WLAN networks, each access point is assigned a portion of frequencies/bandwidth which different from adjacent access points) identifying the subband assigned to it and/or identifying the second radio station and information identifying the subband assigned to it (Par. 5) .

Referring to claim 13, Song discloses the method according to claim 12, wherein, in addition to the path identification information, the radio installation transmits to the first radio station: information identifying the transferee radio station for the first radio

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station, and information identifying the subband assigned to its transferee radio station, and the radio installation transmits to each intermediate radio station: the path identification information, information identifying the transferee radio station, and information identifying the subband assigned to the transferee radio station (Song, Fig. 1-3, note that identifying information with respect to subbands allocated to access points and downlink and uplink mobile terminal is inherent in the WLANs so that the same frequency or subband is not assigned to different radio nodes).

Referring to claim 14, Song discloses the method according to claim 13, wherein the radio installation transmits to each intermediate radio station information identifying the transferor radio station for the intermediate radio station, and information identifying the subband assigned to the transferor radio station (Fig. 1-3, note that identifying information with respect to subbands allocated to access points and downlink and uplink mobile terminal is inherent in the WLANs so that the same frequency or subband is not assigned to different radio nodes).

Referring to claim 15, Song disclose the method according to claim 12, wherein, the radio installation transmits the path identification information to the second radio station (Fig.1 and Par. 7).

Referring to claim 16, Song discloses the method according to claim 15, wherein the radio installation also transmits to the second radio station information identifying the transferor radio station for the second radio station and information identifying the

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subband assigned to the transferor radio station (Fig. and see the rejection of claim 1 above).

Referring to claim 17, Song disclose the method according to claim 12, wherein, the radio stations of the radio communications system are combined into groups, each group has a single representative radio station, and the radio installation only communicates with the representative radio stations in transmitting the path identification information, the information identifying the radio station and the information identifying the subband assigned on it (Fig. 1-3 and see the rejection of claim 1 above).

Referring to claim 18, claim 18 is rejected for the same reason as that of claim 17.

Claim 19 is rejected for the same reasons as claim 17.

Claims 20-24 are rejected for the same reasons as claims 13-16.

Claims 25-27 are rejected for the same reasons as claims 12 and 17-19).

Claim 28 is rejected for the same reason as claim 12.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

References Kim (US 2003/0087645), Hassan (US 2003/0022670) and Wu (2003/0227889) discloses methods, networks and systems of channel allocations, WLAN design, and how communication takes place between mobile nodes within a WLAN.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Harper, can be reached at (571) 272-7605. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/VINCENT P. HARPER/

Supervisory Patent Examiner, Art Unit 2617